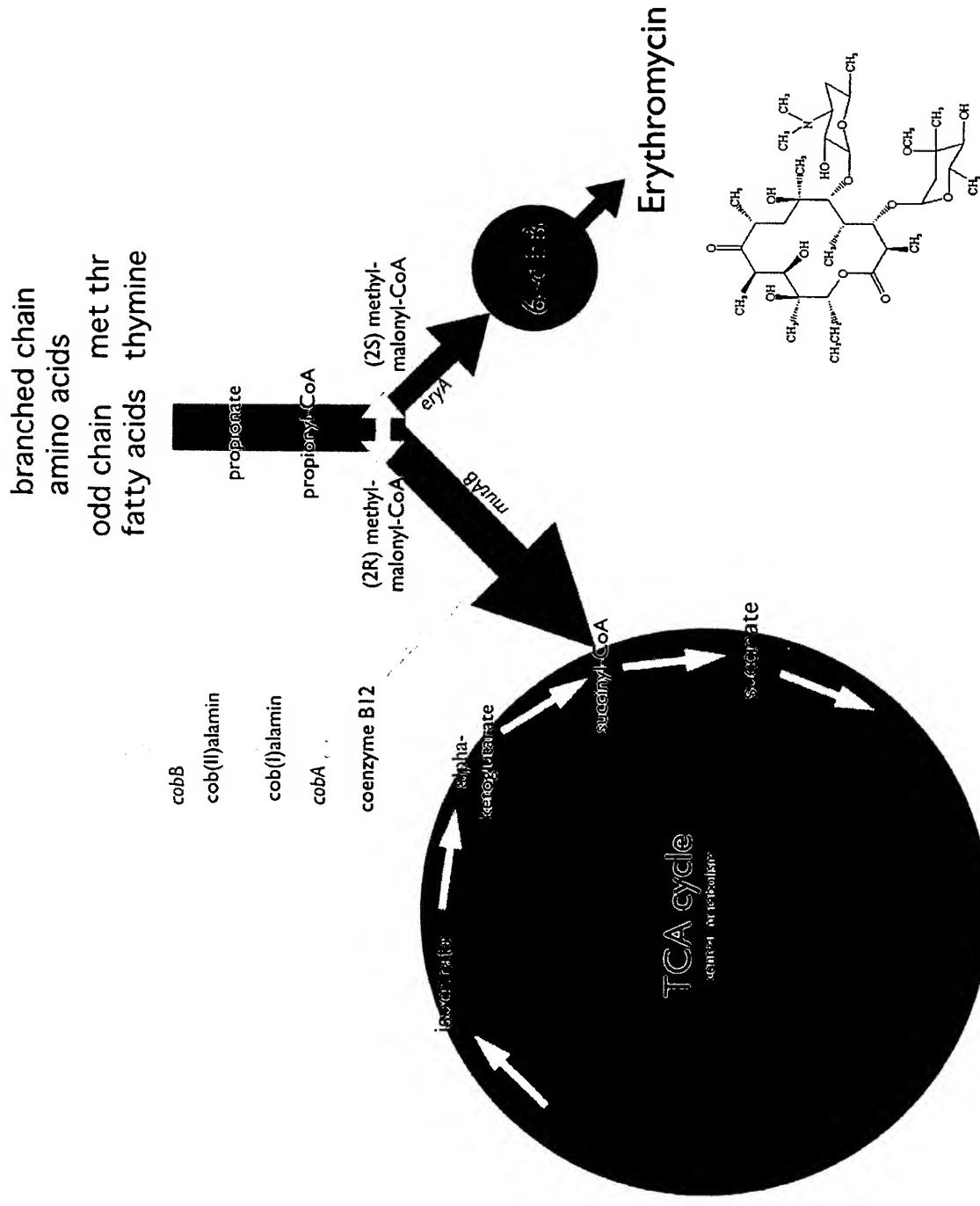


Fig. 1



**Fig. 2 patent:** *MutB* partial sequence with insertion site bolded (the actual insertion of the transposon was between the two bolded nucleotides)

GCGGTCGACGGCGCCGAGCCGTGGGACGCCCCGAGGGCATCGCGGTCAAGAACCT  
CTACACCGCCGACGACCTCGCCGACGTCGACGCGCTCGACACCTACCCGGGCCTCGC  
GCCGTTCTGCGCGGTCCCTACCCGGCCATGTACACGACCCAGCCGTGGACGATCCG  
CCAGTACGCCGGGTTCTCGACCGCCGAGGAGTCGAACGCGTTCTACCGCCGCAACCT  
CGCCGCCGGCCAAAAGGGCCTCTCGGTGCGCTTCGACCTCGCGACGCACCGCGGCT  
ACGACTCCGACCACCCGCGCGTGAAGGGCGACGTCGGCATGGCCGGCGTCGCGATC  
GACTCGATCTACGACGCCC GCCAGCTCTTCGACGGCATCCCGCTCGACGAGATGAGC  
GTCTCGATGACCATGAACGGCGCGGTGCTCCCGGTGCTCGCGCTCTACATCGTGGCG  
GCCGAGGAGCAGGGGGTGACGCCGAGCAGCTCTCGGGGACCATCCAGAACGACA  
TCCTCAAGGAGTTCATGGTCCGCAACACCTACATCTACCCGCCGGCGCCGTCGATGC  
GGATCATCTCCGACATCTTCGCGTACACGGCGGCGAAGATGCCGCGGTTCAACTCCA  
TCTCCATCTCCGGGTACCACATCCAAGAGGGCCGGGGCGACGAACGACCTCGAGCTC  
GCCTACACGCTCGCCGACGGTGTGGAGTACATCCGCGCCGGGCTCGACGTCGGCCTC  
GACATCGACGCGTTCGCGCCGCGGCTCAGCTTCTTCTGGGCCATCGGCATGAACTTC  
TACATGGAGATCGCGAAGATGCGCGCCGCCCGTGCCCTGWGGGCCCGGCTCGTGCG  
CGACTTCGACCCGAAGAACCCCAAGAGCCT**TC**AGCCTGCGCACGCACAGCCAGACA  
TCGGGCTGGAGCCTCACC GCGCAGGACGTGTTCAACAACGTCCAGCGCACCTGCAT  
CGAGGCGATGGCCGCCACGCAGGGCCACACCCAGAGCCTGCACACGAACGCGCTCG  
ACGAGGCGATCGCGCTGCCGACGGACTTCAGCGCGCGGATCGCCCGCAACACGCAG  
CTGCTGCTGCAGCAGGAGTCGGGCACCAACGGCGTCATCGACCCGTGGGGCGGCTC  
CTACTACGTCGAGAAGCTGACGCACGACCTCGCGAACC GCGCCTGGGCGCACATCC  
AGGAGGTCGAGAAGGCCGGCGGCATGGCCAAGGCCATCGAGGCGGGCATCCCCAA  
GATGCGCGTCGAGGAGGCGGCCGCCCGCACGCAGGCACGCATCGACTCCGGCCAGC  
AGGCCGTATCGGCGTCAACACCTACCGCCTCGCCGACGAGGACCCGCTCGACGTG  
CTCAAGGTCGACAACGCGTCGGTCTACGCCCAGCAGGTGGCGAAGCTCGAGCGACT  
GCGCGCCGAGCGCGACCCGCAGGAGGTCGAGCGCGCGCTCGACGCCCTGACGGCCA  
GCGCCGAGCGTGGCGCCAGCCGCGACGGCTCGCTCGACGGCAACCTGCTCGCCCTG  
GCCGTCGACGCGGCCCGCGCGAAGGCGACGGTCGGCGAGATCTCCTACGCGCTCGA  
GAAGGTCTACGGGCGCCACCAGGCCGTCATCCGTACGATCTCCGGTGTGTACCGGA  
CCGAGGCGGGCCAGGGCGGCAACGTCCAGAAGGTCATCGACGCCACCGAGGCGTTC  
GAGAAGGCCGAGGGTCGACGCCCGCGCATCCTCGTGGCCAAGATGGGCCAGGACGG  
CCACGACCGCGGCCAGAAGGTCATCGTCACGGCGTTCGCCGACATGGGCTTCGACG  
TCGACGTCGGACCGCTGTTCTCCACGCCCGAGGAGGTCGCGCAGCAGGCCGTGGAC  
GCCGACGTGCACATCGTCGGCGTCTCGAGCCTCGCGGCGGGCCACCTGACGCTCCTG  
CCGGAGCTGAAGAAGGCGTTGGCCGAGCTCGGCGGCGAGGACGTCATGGTTCGTCAT  
GGGTGGCGTCATCCCGCCCCGACGACGTGCCGACGCTGAAGGAGATGGGCGCTGCCG  
AGGTGTTCTGCCCCGGCACGGTCATCGCCGACTCCGCGCTCAGCCTGCTCGAGCGGT  
CCGCGCGAGCCTGCAGCACTAGATGGTTCGGTTCGTCCGAGGTAA

**Fig. 3 patent: Transposon sequence 3,764 bp.**

CTGTCTCTTATACACATCTCAACCATCATCGATGAATTCCACCCTGTGAATGCGCAA  
ACCAACCCTTGGCAGAACATATCCATCGCGTCCGCCATCTCCAGCAGCCGCACGCGG  
CGCATCTCGGGCAGCGTTGGGTCTTGGCCACGGGTGCGCATGATCGTGCTCCTGTGCG  
TTGAGGACCCGGCTAGGCTGGCGGGGTTGCCTTACTGGTTAGCAGAATGAATCACCG  
ATACGCGAGCGAACGTGAAGCGACTGCTGCTGCAAAACGTCTGCGACCTGAGCAAC  
AACATGAATGGTCTTTCGGTTTCCGTGTTTCGTAAAGTCTGGAAACGCGGAAGTCAGC  
GCCCTGCACCATTATGTTCCGGATCTATGTCGGGTGCGGAGAAAGAGGTAATGAAAT  
GGCAGATCCCTGGCTTGTGTTGCCACAACCGTTAAACCTTAAAAGCTTTAAAAGCCTT  
ATATATTCTTTTTTTTTCTTATAAACTTAAAACCTTAGAGGCTATTTAAGTTGCTGAT  
TTATATTAATTTTATTGTTCAAACATGAGAGCTTAGTACGTGAAACATGAGAGCTTA  
GTACGTTAGCCATGAGAGCTTAGTACGTTAGCCATGAGGGTTTAGTTTCGTTAAACAT  
GAGAGCTTAGTACGTTAAACATGAGAGCTTAGTACGTGAAACATGAGAGCTTAGTA  
CGTACTATCAACAGGTTGAACTGCTGATCTTCGGATCTATGTCGGGTGCGGAGAAAG  
AGGTAATGAAATGGCATCCGGATCTGCATCGCAGGATGCTGCTGGCTACCCTGTGGA  
ACACCTACATCTGTATTAACGAAGCAATTCGAATTCACAGAGGCGCTTATCGGTTGG  
CCGCGAGATTCTGTGTCGATCCTCTCGTGCAGCGCGATTCCGAGGGAAACGGAAACG  
TTGAGAGACTCGGTCTGGCTCATCATGGGGATGGAAACCGAGGCGGAAGACGCCTC  
CTCGAACAGGTCGGAAGGCCACCCCTTTTCGCTGCCGAACAGCAAGGCCAGCCGAT  
CCGGATTGTCCCCGAGTTCCTTCACGGAAATGTCGCCATCCGCCTTGAGCGTCATCA  
GCTGCATACCGCTGTCCCGAATGAAGGCGATGGCCTCCTCGCGACCGGAGAGAACG  
ACGGGAAGGGAGAAGACGTAACCTCGGCTGGCCCTTTGGAGACGCCGGTCCGCGAT  
GCTGGTGATGTCACTGTCGACCAGGATGATCCCCGACGCTCCGAGCGCGAGCGACG  
TGCGTACTATCGCGCCGATGTTCCCGACGATCTTCACCCCGTCGAGAACGACGACGT  
CCCCACGCCGGCTCGCGATATCGCCGAACCTGGCCGGGCGAGGGACGCGGGCGATG  
CCGAATGTCTTGGCCTTCCGCTCCCCCTTGAACAACCTGGTTGACGATCGAGGAGTCG  
ATGAGGCGGACCGGTATGTTCTGCCGCCCGCACAGATCCAGCAACTCAGATGGAAA  
AGGACTGCTGTCGCTGCCGTAGACCTCGATGAACTCCACCCCGGCCGCGATGCTGTG  
CATGAGGGGCTCGACGTCCTCGATCAACGTTGTCTTTATGTTGGATCGCGACGGCTT  
GGTGACATCGATGATCCGCTGCACCGCGGGATCGGACGGATTTGCGATGGTGTCCA  
ACTCAGTCATGGTCGTCTACCGGCTGCTGTGTTTCAGTGACGCGATTCTGGGGTGT  
GACACCCTACGCGACGATGGCGGATGGCTGCCCTGACCGGCAATCACCACGCAAG  
GGGAAGTCGTCGCTCTCTGGCAAAGCTCCCCGCTCTTCCCCGTCCGGGACCCGCGCG  
GTCGATCCCCGCATATGAAGTATTCGCCTTGATCAGATCAGGTACCCGGGGATCATC  
TTATTAATCAGATAAAATATTTCTAGATTTTCAGTGCAATTTATCTCTTCAAATGTAGC  
ACCTGAAGTCAGCCCCATACGATATAAGTTGTAATTCTCATGTTTGACAGCTTATCA  
TCGATAAGCTTTAATGCGGTAGTTTATCACAGTTAAATTGCTAACGCAGTCAGGCAC  
CGTGTATGAAATCTAACAATGCGCTCATCGTCATCCTCGGCACCGTCACCCTGGATG  
CTGTAGGCATAGGCTTGGTTATGCCGGTACTGCCGGGCTCTTGCGGGATATCGTCC  
ATTCCGACAGCATCGCCAGTCACTATGGCGTGCTGCTAGCGCTATATGCGTTGATGC  
AATTTCTATGCGCACCCGTTCTCGGAGCACTGTCCGACCGCTTTGGCCGCCGCCAG  
TCCTGCTCGCTTCGCTACTTGGAGCCACTATCGACTACGCGATCATGGCGACCACAC  
CCGTCCTGTGGATCCTCTACGCCGGACGCATCGTGGCCGGCATCACC GGCGCCACAG  
GTGCGGTTGCTGGCGCCTATATCGCCGACATCACC GATGGGGAAGATCGGGCTCGC  
CACTTCGGGCTCATGAGCGCTTGTTTCGGCGTGGGTATGGTGGCAGGCCCCCGTGGCC

Fig. 3 cont'd

GGGGGACTGTTGGGCGCCATCTCCTTG CATGCACCATTCCTTGCGGCGGCGGTGCTC  
AACGGCCTCAACCTACTACTGGGCTGCTTCCTAATGCAGGAGTCGCATAAGGGAGA  
GCGTCGACCGATGCCCTTGAGAGCCTTCAACCCAGTCAGCTCCTTCCGGTGGGCGCG  
GGGCATGACTATCGTCGCCGCACTTATGACTGTCTTCTTTATCATGCAACTCGTAGG  
ACAGGTGCCGGCAGCGCTCTGGGTCATTTTCGGCGAGGACCGCTTTCGCTGGAGCGC  
GACGATGATCGGCCTGTCGCTTGCGGTATTCGGAATCTTGACGCCCTCGCTCAAGC  
CTTCGTCACTGGTCCCGCCACCAAACGTTTTCGGCGAGAAGCAGGCCATTATCGCCGG  
CATGGCGGCCGACGCGCTGGGCTACGTCTTGCTGGCGTTCGCGACGCGAGGCTGGA  
TGGCCTTCCCCATTATGATTCTTCTCGCTTCCGGCGGCATCGGGATGCCCGCGTTGCA  
GGCCATGCTGTCCAGGCAGGTAGATGACGACCATCAGGGACAGCTTCAAGGATCGC  
TCGCGGCTCTTACCAGCCTAACTTCGATCATTGGACCGCTGATCGTCACGGCGATTT  
ATGCCGCCTCGGCGAGCACATGGAACGGGTGGCATGGATTGTAGGCGCCGCCCTA  
TACCTTGTCTGCCTCCCCGCGTTGCGTCGCGGTGCATGGAGCCGGGGCCACCTCGACC  
TGAATGGAAGCCGGCGGCACCTCGCTAACGGATTCACTCAAGAATTGGAGCC  
AATCAATTCTTGCGGAGAACTGTGAATGCGCAAACCAACCCTTGGCAGAACATATCC  
ATCGCGTCCGCCATCTCCAGCAGCGCACGCGGCGCATCTCGGGCACGTTGGGTCCTG  
GAATTCGAGCTCGGTACCAGCCCGACCCGAGCACGCGCCGGCACGCCTGGTAGATG  
TCGGACCGGAGTTCGAGGTACGCGGCTTGCAAGGTCCAGGAAGGGGACGTCCATGCG  
AGTGTCCGTTTCGAGTGGCGGCTTGCGCCCGATGCTAGTCGCCGTTGATCGGCGATCG  
CAGGTGCACGCGGTGATCTTGACGGCTGGCGAGAGGTGCGGGAGGATCTGACCGA  
CCCGGTCCACACGTGGCACCGCGATGCTGTTGTGGGCTGGACAATCGTGCCGGTTGG  
TAGGATCCTCTAGAGTCGACGCATGCAAGCTTCTGCAGGCATGCAAGCTTCAGGGTT  
GAGATGTGTATAAGAGACAG

**Fig. 4: cobA DNA sequence with insertion site bolded** (the actual insertion of the transposon was between the two bolded nucleotides)

ATGCCCCAGGGCCAGCCGCTGGTCGTCCCCGACGACGGCCTCACCACCCGCCAGCG  
TCGCAACCGTCCGCTCGTCATGGTCCACACCGGGCCCGGCAAGGGGAAGTCGACCG  
CCGCGTTCGGCCTCGCCATGCGCGCCTGGAACCAGGGCTGGAAGGTCGGCGTGTTCC  
AGTTCGTGAAGTCCGCCAAGTGGCGCGTCGGCGAGCAGAGCGTGCTCGAGCACCTG  
GGCCGCCTGCAC**G**AGACCGAGGGCCTCGGCGGGCCCGTCGAGTGGCACAAGATGG  
GCTCGGGCTGGTCGTGGTCGCGCAAGTCGGGCACCGACGACGACCACGCCGTCGCC  
GCCGCCGAGGGCTGGGCCGAGATCAAGCGTCGCCTCGCCACCGAGACGCACGACCT  
CTACGTGCTCGACGAGTTCACCTACCCGATGAAGTGGGGCTGGGTGACGTCGACG  
ACGTCGCCGACACGCTCGCGTCGCGCCCCGGCCGCCAGCACGTGGTGATCACCGGC  
CGCGACGCCGCCCCCGGCTCCTGGAGGTCGCCGACCTCGTCACCGAGATGACGAA  
GGTCAAGCACCCCATGGACGTCGGCCAGAAGGGTCAGCGAGGCATCGAGTGGTGA.